

FIREFLY™ HIGH-DENSITY COPPER FLYOVER® SYSTEM



FEATURES & BENEFITS

- Pin compatible with optical FireFly™ using the same connector system
- Data connection is taken "off board" for easier routing
- Low-cost solution for seamless integration of new and existing designs
- Low-profile housing for space savings
- x4 bidirectional or x12 unidirectional
- Variety of end 2 termination options

14
G b p s

x4 Bidirectional ECUE
x12 Unidirectional ECUE

PAM 4

56
G b p s

x4 Bidirectional ECUE-2



Standard Copper (ECUE)

- 14 Gbps
- 100 Ω, 34 AWG or 36 AWG Eye Speed® twinax cable



Optimized Copper (ECUE-2)

- 28 Gbps card design
- 100 Ω, 34 AWG Eye Speed® ultra low skew twinax cable
- Optimized for use with connector UEC5-2



PCI Express®-Over-FireFly™ Copper (PCUE)

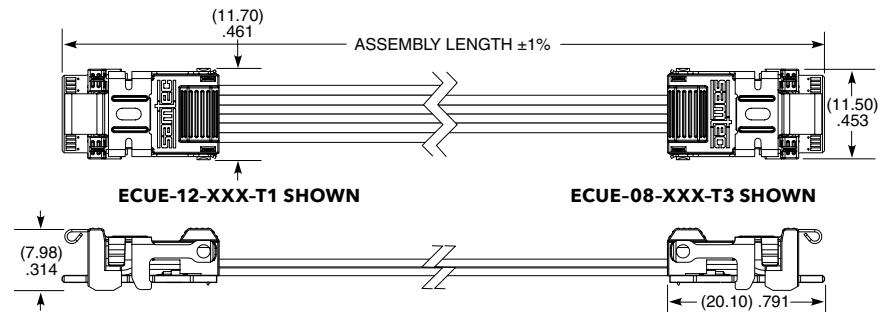
- PCIe® 4.0
- 100 Ω, 34 AWG Eye Speed® ultra low skew twinax cable
- Optimized for use with connector UEC5-2

LOW-PROFILE MICRO FLYOVER® CABLE

SERIES	NO OF PAIRS	ASSEMBLY LENGTH	CABLE TYPE	END 2 OPTION	WIRING OPTION	DATA RATE	OPTION
ECUE = Rugged FireFly™ Cable Assembly	-08 = Eight Pair (-T2 & -T3 cable only) -12 = Twelve Pair (-T1 cable only)	-“XXX” = Assembly Length in Centimeters (007 cm to 999 cm)	-T1 = 36 AWG twinax (-12 pairs only) -T2 = 34 AWG twinax (-08 pairs only) -T3 = 34 AWG ultra low skew twinax (-08 pairs only)	-FF = FireFly™ (Mates with UEC5/UCC8)	-01 = Pin A1 to Pin A19 -02 = Pin A1 to Pin B1 -B4 = Pin A1 to Pin B19 (-08 pair only)	-1 = 14 Gbps (-T1 or -T2 only) -2 = 28 Gbps (-T3 only)	Leave blank for standard FireFly™ -D1 = Decoupling Capacitors (only available with -02 & -B4 wire options)

ECUE

Board Mates:
UEC5, UCC8



Notes:

All FireFly™ designs, specifications and components are preliminary and subject to change without notice.

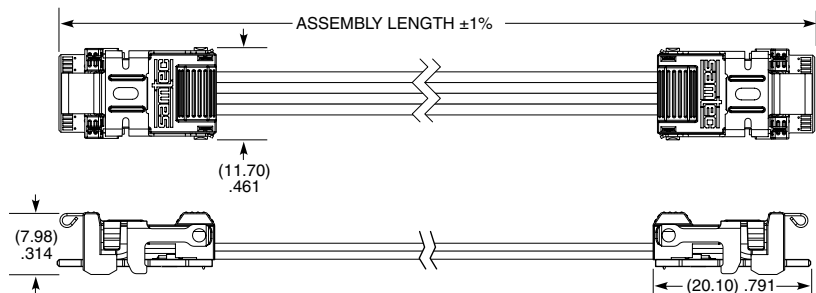
Cable lengths longer than 150 cm (59.06") are not supported with S.I. test data.

View complete specifications at: samtec.com?ECUE

SERIES	SPEED	NO. OF CHANNELS	CABLE LENGTH	END 2
PCUE = PCIe®-over-FireFly™ Copper Flyover®	-G4 = Gen 4 Speed	-04 = 8 pairs	-“XXX” = Overall Length in Centimeters (010 cm to 999 cm)	-FF = FireFly™ (Mates with UEC5/UCC8)

PCUE

Board Mates:
UEC5, UCC8



Notes:

Supports PCIe® sideband signals

Two additional low speed channels compatible with PCUO or custom usage

Decoupling capacitors in-line with signals on PCB.

PCI-SIG®, PCI Express® and the PCIe® design marks are registered trademarks and/or service marks of PCI-SIG.

Some sizes, styles and options are non-standard, non-returnable.

View complete specifications at: samtec.com?PCUE

Mouser Electronics

Authorized Distributor

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[ECUE-12-050-T1-FF-01-1](#) [ECUE-12-050-T1-FF-02-1-D1](#) [ECUE-08-050-T2-FF-B4-1](#) [ECUE-08-050-T2-FF-B4-1-D1](#)
[ECUE-08-025-T2-FF-B4-1](#) [ECUE-12-025-T1-FF-02-1-D1](#) [ECUE-08-025-T2-FF-B4-1-D1](#) [ECUE-12-025-T1-FF-01-1](#)
[ECUE-12-082-T1-FF-02-1](#) [ECUE-12-040-C1-FF-02-1](#)